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development concept plan environmental assessment

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DEVELOPMENT CONCEPT PLAN/ENVIRONMENTAL ASSESSMENT

MONOCACY NATIONAL BATTLEFIELD - BUSH CREEK SITE
MARYLAND



NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR

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SUMMARY

This development concept plan and environmental assessment (DCP/EA) presents a proposed plan and two alternatives for the development of the Bush Creek site in Monocacy National Battlefield. The 1980 general management plan identified the Bush Creek site as the main development site for visitor, administrative, and maintenance facilities. Currently, the battlefield is undeveloped and closed to the public. The two major properties that have been acquired through the land protection process are the Bush Creek and Worthington farm tracts.

The purpose of this DCP/EA is to identify the location, type, and scale of development necessary to meet anticipated visitor and park needs and to assess the effects of such development on the environment. Parts of this draft plan encompass areas beyond the Bush Creek site in order to adequately address related visitor circulation and interpretation needs.

The proposed development concept plan (Alternative A) is a phased approach to providing primary visitor services. The first phase would open the battlefield to public use through the installation of a self-guiding system of interpretive waysides that would be accessible directly off the local road system. Once this phase is implemented, efforts would then proceed to design and develop a small visitor contact and comfort station. Its recommended location is the Bush Creek site overlooking the Monocacy River near state route 355. This facility would provide visitor information, orientation, and restroom services. The location would also be the starting point of the interpretive tour and hiking trail system. The majority of maintenance services would be contracted out.

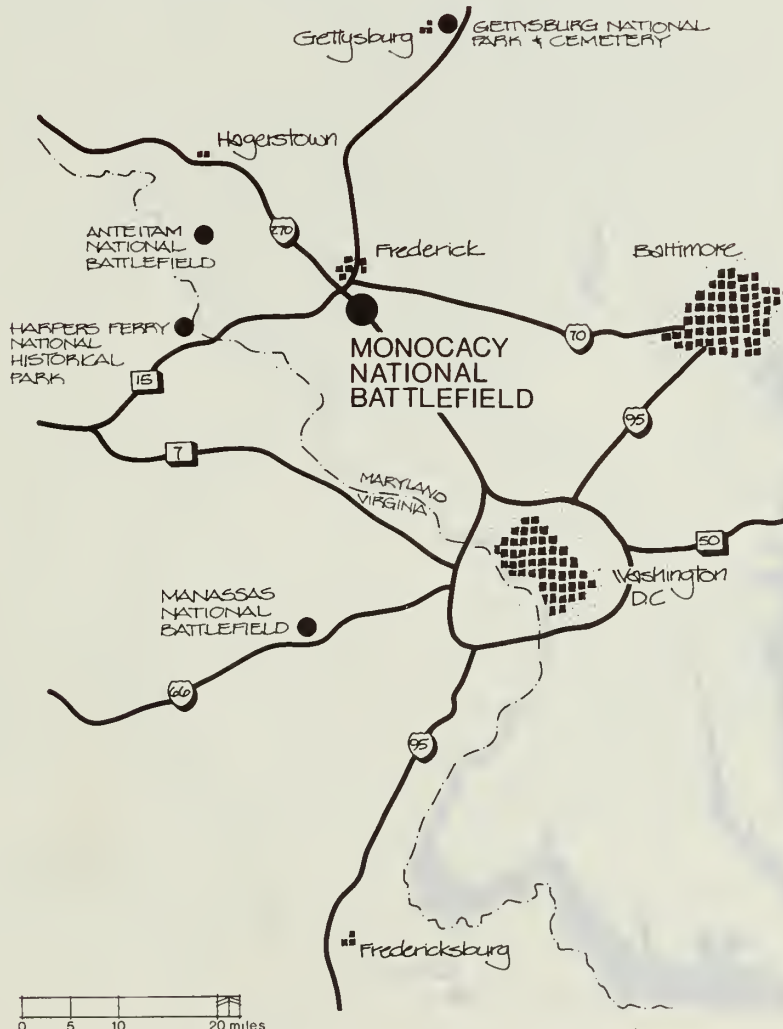
Alternative B addresses the option to continue current operations, which would keep the park closed and undeveloped, but would allow resource protection activities to continue. Alternative C provides for a more comprehensive treatment of the battle story and for a more autonomous park operation. As in Alternative A, the first phase of development would be an interpretive wayside system. Second phase development

would entail constructing a visitor center to provide more comprehensive visitor services. It would feature an interpretive audiovisual program. Maintenance services would be provided by the park, with a facility located near the visitor center.

INTRODUCTION

PARK DESCRIPTION

Monocacy National Battlefield, which is administered by the superintendent of Antietam National Battlefield, is located in Frederick County, Maryland, three miles south of the city of Frederick. The site is less than an hour's drive from the major population centers of Baltimore, Maryland and Washington, D.C., with easy access from Interstates 270 and 70. It is also within reasonable driving distance of several major Civil War sites, such as Gettysburg National Battlefield, Antietam National Battlefield, Harpers Ferry National Historical Park, and Manassas National Battlefield.



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MONOCACY NATIONAL BATTLEFIELD
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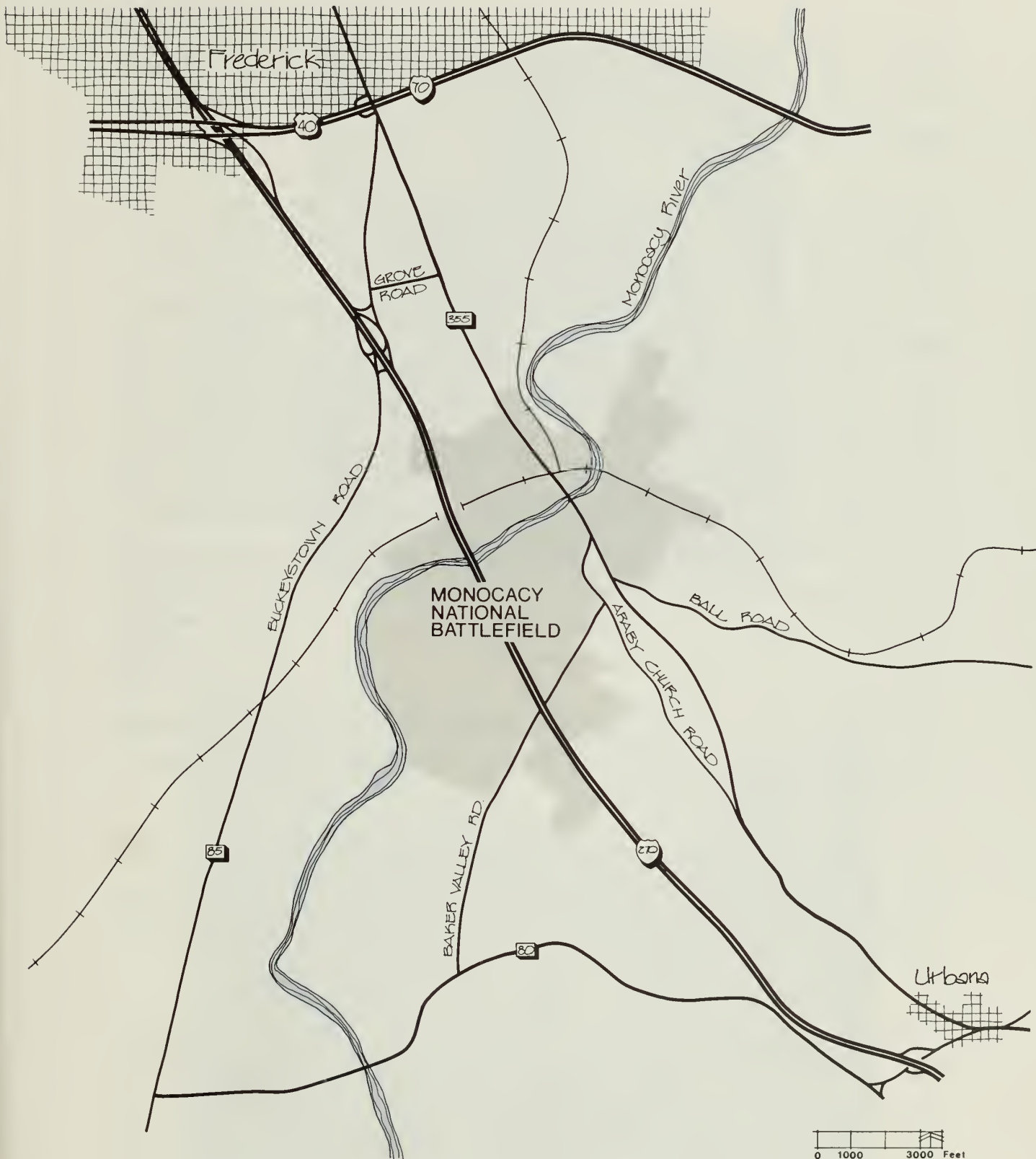
Monocacy National Battlefield was created in 1934 by an Act of Congress (48 Stat. 1198) as Monocacy National Military Park. This park was established to "commemorate the Battle of Monocacy, Maryland, and to preserve for historical purposes the breastworks, earthworks, walls, or other defenses or shelters used by the armies therein." The act authorized the appropriation of some development monies with the understanding that any necessary land would be donated to the Government at no cost. However, no land was donated and, consequently, no development took place.

In 1975, the Battlefield, encompassing approximately 1,200 acres, was placed on the National Register of Historic Places as a national landmark, thereby making it subject to the provisions of the National Historic Preservation Act of 1966. During the same year, new legislation for the authorization of acquisition and development monies was introduced by Representative Goodloe Byron. This effort resulted in 1976 in Public Law 94-578 (90 Stat. 2732), which authorized acquisition of up to 1,000 acres with appropriated funds. The bill required submission of a master plan to Congress within three years, and changed the park's name to Monocacy National Battlefield.

Further legislation in 1978, Public Law 95-625, expanded the park's boundary by adding approximately 587 acres to the park and authorizing \$3,500,000.00 for acquisition.

In 1980 a General Management Plan was approved, followed in 1983 by an approved Land Protection Plan (LPP). Through implementation of the LPP, 426 acres have been purchased; 8 are in scenic easement, and another 414 are identified for fee purchase or donation. Most of the remaining 811 acres are identified for scenic easement.

The patchwork of farms which formed the backdrop to the battle has changed little since July 9, 1864. These five original farm tracts comprise most of the battlefield's 1,659 acres and are currently in pasture or crops. Most of the acreage in NPS ownership consists of the Bush Creek area (Gambrill Farm) and the Worthington farm tract.



Location Map

MONOCACY NATIONAL BATTLEFIELD
United States Department of the Interior National Park Service

A key land parcel identified for purchase is the Thomas farm tract (240 acres), which is in the center of the battlefield and was the site of some of the heaviest fighting. The Baker and Best farms are identified for scenic easement.

The Bush Creek site encompasses approximately 140 acres in the northeast corner of the battlefield. Historically, this site was known as the Gambrill farm, owned and operated by James H. Gambrill, a prominent miller in the Frederick community. The original Gambrill house had been located very close to the mill and is believed to have been a simple frame house. It presumably was destroyed at some date after the battle. James H. Gambrill replaced it around 1868 (see Gambrill Mill Site Evaluation, 1984, by Ronald W. Johnson) with a lavish three-story Victorian house, upslope from the original house site. This house stands today, and although not associated with the Civil War, it has been placed on the National Register of Historic Places because of its architectural and local significance. The Gambrill mill, used during the battle as a hospital, still stands today, although in a highly modified condition. The original roof, upper floor, and the interior mill works are gone. The interior has been converted into apartments, and currently the upper floor apartment serves as park housing. Because the mill has been so modified, it does not qualify for the National Register of Historic Places.

Just north of the mill is a stable operation which boards horses and uses the surrounding land for grazing. In the woods near the stables are visible remnants of the mill race, which is relatively intact all the way to Bush Creek.

The dirt road which divides the two grazing fields within the floodplain was used as the route of retreat by Union troops. Beyond where the road fords Bush Creek, no trace is identifiable until one crosses the railroad tracks. Nearby, on the bluffs overlooking the river, evidence of a blockhouse foundation still exists, as well as a line of trenches.



Gambrill House



Gambrill House (Side View)



Gambrill Mill



Gambrill Mill (Side View)

PURPOSE AND NEED FOR THE PLAN

The 1980 general management plan for Monocacy National Battlefield identified the Bush Creek area as the primary site for visitor information and orientation, park support, and maintenance facilities. The purpose of this draft development concept plan is to identify the type, location, and scale of development necessary to meet visitor and park needs. Presently, Monocacy National Battlefield is closed to the general public. A plan, once approved, will provide the guidance necessary to begin specific actions to open the park to visitors.

When the general management plan was being prepared, all park acreage was in private ownership. As a result, access to sites within the park and to resource information was limited. Based on what information was available, the Bush Creek site was identified for development for two major reasons. The Bush Creek site is outside the core battle area where the heaviest fighting occurred. Therefore, any major development there would not significantly impact the historic scene. Second, the Bush Creek site had several existing buildings which had potential as visitor or administrative facilities.

To determine if these structures would be appropriate for park use, several in-house studies were prepared early in this development concept planning process. These studies include 1) Structural Survey of Gambrill House and Gambrill Mill, 2) Historical Architecture Survey of Gambrill House, 3) Gambrill Mill Site Evaluation and Brief Special History Study, 4) Evaluation of Archeological Resources, and 5) Electrical Survey of Gambrill House, Mill, and Stables. Based on this information, other data, and the concepts that evolved concerning the desired visitor experience and scale of development, the Gambrill house and mill were eliminated from consideration as park facilities. (See also Other Alternatives Considered.) The option of removing the Gambrill house was considered as a viable alternative but met with vocal public opposition during a public meeting in July, 1984, and from written responses after the meeting. This was the only major issue that the public responded to during the course of the planning process.

Once it became evident that the Gambrill house would be inappropriate as a park facility, a decision was made to lease the structure through the Historic Property Leasing Program. This leasing program assures that a structure such as the Gambrill house would receive the repair, maintenance, and protection it needs for its preservation. All work on the structure by the lessee would have to be in accordance with the Secretary of the Interior's Standards for Historic Preservation Projects, the NPS Cultural Resources Management Guideline (NPS-28), and other specific criteria required by the Park Service.

Negotiations over a lease began in September 1985. Other structures included in the lease discussions are the stables and the Gambrill mill. Although the Gambrill farm site is outside the core battle area, a significant amount of battle-related activity occurred on the property. It is important that the public have access (pedestrian access) to the site, particularly for the interpretation of the final phase of the battle. As part of this interpretation, it is important that lessee activities do not introduce inappropriate landscape treatments that diverge from the Civil War period farm setting.

Once a lease is agreed to, the structures will be rehabilitated and maintained in good condition by the lessee. It is anticipated that both the house and stables structures will be used for a corporate conference center where food, lodging, and meeting rooms will be provided. The Gambrill mill will be used as a manager's residence and the stables will undergo significant alterations.

A development concept plan and two alternative approaches to development in the Bush Creek site have been prepared and are presented in this report. The effects of these alternatives on the park environment have been assessed and are included in the attached environmental assessment. Also, in order to provide coordinated planning for visitor access and circulation, this plan looks beyond the Bush Creek site to areas where interpretive waysides and trails will be located. The detailed aspects of interpretive planning and trail design will be covered in an interpretive prospectus to be prepared by the

Harpers Ferry Center following the approval of a development concept plan.

ISSUES

The issues described below were identified at the outset of the planning process and served to guide the development of the alternatives contained in this document.

Cultural Resources

Monocacy Battlefield, its historic scene, and the historic structures therein comprise the nationally significant resources for which this area was added to the National Park System. Because many of the farms which were active during the Civil War are still operational, the historic battlefield scene is well preserved. The primary threat to the quality of the historic scene is potential commercial and industrial development along the park's northern boundary.

The historic scene will be protected from within the battlefield as farms are purchased by NPS and it becomes the park's responsibility to maintain the historic structures and the large open tracts of farmland. Due to the park's topography, many prominent battlefield sites are visible from other sites within the park. Potential threats to the historic scene exist where development on one site would affect the quality of the scene from others.

Of the structures on the Bush Creek site, only the Gambrill mill existed at the time of the battle. During the battle it served as a Union field hospital. The mill's appearance has been altered considerably since the battle. Research is necessary to determine the original appearance of the mill operation and the feasibility of adapting it for visitor use. The current Gambrill house, though not related to the battle, is historic and should be assessed for its potential as a park facility.

Natural Resources

In the process of planning for development of roads, parking areas, trails, vistas, picnic sites, and structures, careful consideration will have to be given to the potential effects of such development, including tree removal, soil compaction, and soil erosion.

Interpretation

The major thrusts of interpretation are to tell the story of the Battle of Monocacy and to present its significance in context to the Civil War and American history. Specific interpretive objectives and the manner in which they will be accomplished need to be identified. Once identified they will be important factors in determining the interpretive facilities and media needed at the site.

Visitor Use

An appropriate system of circulation is needed for a broad spectrum of visitors, including handicapped individuals, which provides for safe ingress and egress, adequate parking, and effective linkage between interpretive sites.

In planning for visitor facilities, the needs and characteristics of many kinds of potential visitors, such as school groups, bus tours, historians, local residents, and out-of-town visitors, should be taken into consideration.

Public awareness and use of Monocacy Battlefield will increase gradually. The visitation analysis in the 1979 Assessment of Alternatives for Monocacy National Battlefield indicated that during the first five years of park operation, annual visitation will range between 10,000 to 50,000 persons. Once the battlefield is completely developed, it may receive as many as 350,000 visitors annually. In order to provide adequate facilities for initial and future visitation levels, facility development will be phased. For each phase of development, staffing and space

requirements will need to be determined, as well as the location and cost of needed facilities.

The site presently has a post-war Victorian house, a converted Civil War period mill, and two modern stable buildings. The cost and feasibility of stabilizing, adapting, or removing these structures compared to building new structures has to be determined. The Historic Property Leasing Program is an important avenue to explore in determining the future use of these structures.

Recreation

Although provisions for recreation are not primarily significant, the proximity of the park's open space to residents of the city and county of Frederick will make the park an attractive site for outdoor recreation activities. Recreation, therefore, must be recognized and considered in this plan. Development, though, must focus on the preservation and interpretation of the historic resources and on the natural features in their supporting role to these resources.

HISTORICAL PERSPECTIVE

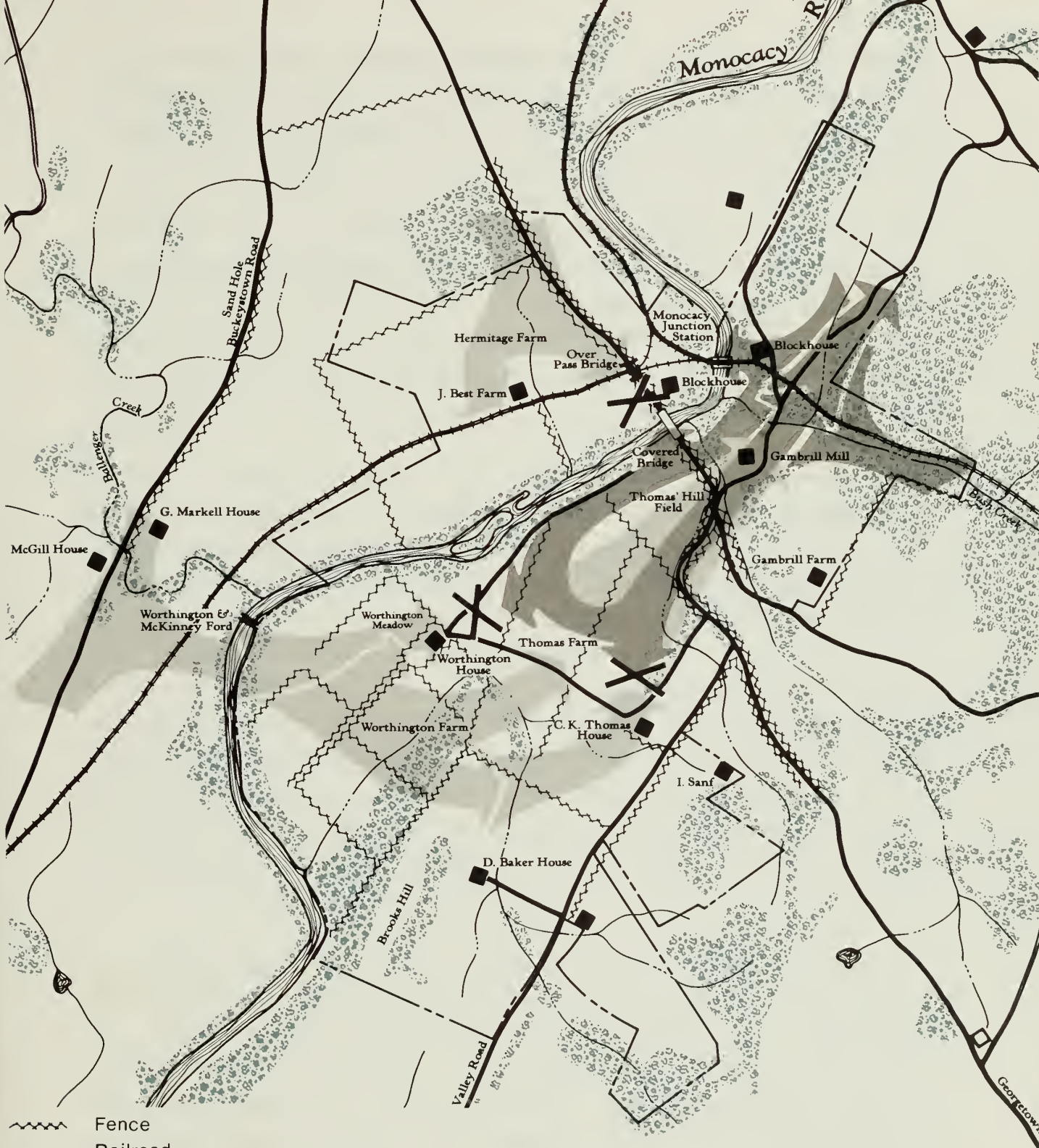
The Battle of Monocacy took place on July 9, 1864, between Confederate forces under the command of General Jubal Early and Union forces under General Lew Wallace. General Early and his troops had advanced up the Shenandoah Valley, crossed the Potomac River into Maryland, and were rushing toward Washington, D.C., which at the time was almost undefended. General Ulysses S. Grant had removed most troops from the capital to aid his troops in putting pressure on General Robert E. Lee at Petersburg, Virginia. General Early had several objectives in his drive on Washington: (1) the capture of Washington and the probable resultant havoc; (2) the release of Confederate prisoners held in Point Lookout, Maryland; and (3) the removal of some pressure from General Lee.

General Wallace, who was stationed in Baltimore, learned of General Early's movements through personnel of the Baltimore and Ohio Railroad. He could not be sure whether Early was marching on Baltimore or Washington, but he knew he needed to engage Early before the Confederates reached either city.

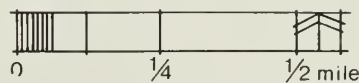
Knowing that there was no strong Union force in the area, General Wallace gathered what men he could--around 5,800 men: part of the VI Corps, militia, clerks and invalids--and proceeded west. Realizing that Frederick was difficult to defend, he chose the Monocacy River because the roads to both Baltimore and Washington crossed it. While he stationed troops at the crossing of the National Road to Baltimore, he concentrated his efforts at Monocacy Junction, since not only the Georgetown Pike to Washington but also the Baltimore and Ohio Railroad crossed the river at this point. Some Confederate troops did encounter Wallace's men on the National Road, but this action was basically peripheral to the battle.

At Monocacy Junction, Wallace's troops occupied two blockhouses which had guarded the junction since 1863 and threw up earthworks along the east bank of the river. The earthworks, in combination with the superior elevations on the east bank, provided the Union soldiers with a defensible position. To prevent the Confederates from firing artillery at pointblank range, Wallace also established skirmish lines on the west side of the river; the skirmishers used the railroad embankment for cover.

On the morning of July 9, General Dodson Ramseur's division marched down the Georgetown Pike and encountered Wallace's troops. It became quickly apparent to the Confederate generals that a frontal attack across the Monocacy would be costly. Therefore, while General Ramseur and General Robert Rodes' divisions (the latter on the National Road) continued to engage the Union force, General John McCausland's cavalry brigade rode south on the Buckeystown Road. Their intelligence had indicated the existence of a ford (Worthington Ford) near the Ballenger Creek entry into the Monocacy River. Because the river was low, General Wallace had detached soldiers to guard the known fords.



-  Fence
-  Railroad
-  Conflict Area
-  Confederate Troops
-  Union Troops
-  Park Boundary



Battle of Monocacy

MONOCACY NATIONAL BATTLEFIELD

United States Department of the Interior

National Park Service

General McCausland's men encountered a squadron of the Illinois cavalry at the Worthington ford, but they dismounted and were able to overcome the defense. They regrouped in the Worthington meadow and advanced to attack General Wallace's left flank.

General James Ricketts, however, had learned of the Confederate approach, and at noon, when McCausland's cavalry topped the rise at Worthington House, they were met by General Ricketts' veteran soldiers positioned behind the fence separating the Worthington and Thomas properties. There ensued some of the heaviest fighting of the day, with the Confederates routed and pursued back beyond the Worthington house.

Since danger was obviously arriving from the Worthington farm, the Union troops shifted once again to prepare their defense on the Thomas farm and Baker Valley Road. General McCausland rallied his troops; he attacked and was defeated a second time. However, on this occasion, he was followed by a three-pronged attack by General John Gordon's division. General Gordon had taken the same path as General McCausland across the Monocacy River, but at the Worthington farm, he sent Terry's Virginia Brigade to the left across the Worthington farm, York's Louisiana Brigade in the center across the toe of Brooks Hill, and Evans' Georgia Brigade to the right over Brooks Hill and across the Baker farm. The Confederates finally reached the Thomas house, where there was heavy fighting.

General Ricketts' troops were unable to hold and retreated toward the National Road to Baltimore; they were quickly joined by the men who had continued to fight generals Ramseur and Rodes throughout the day. By late afternoon the Confederates had secured the railroad bridge. (General Wallace had ordered the covered bridge for the Georgetown Pike burned earlier in the day.) General Early brought all his troops and supplies across the river that night. The Confederate soldiers did what damage they could to the railroad bridge, but were unable to totally destroy it. The Confederates encamped until daybreak, and then continued their march on Washington, only to be thwarted by Grant's

troops who had, only two hours earlier, reinforced the defenses of Washington. It was this delaying action that made the Battle of Monocacy nationally significant. If on July 9 Confederate troops had not encountered Wallace's soldiers, they would have reached Washington before Grant's troops could have returned to defend the city.

INTERPRETIVE OBJECTIVES

- To interpret on site and outdoors the story of the Battle of Monocacy and its significance to the Civil War and American history.
- To provide all visitors barrier-free access to key battle areas in order that they may experience the battlefield first hand.
- To provide adequate information through signs, exhibits, and publications to allow visitors to competently use the park on their own.
- To provide a system of interpretive trails that allow the adventurous visitor a more personal way to discover and explore the battlefield.
- To provide opportunities for staff-led interpretive programs during peak season visitation.
- To limit indoor interpretation activities to the display of simple exhibits interpreting the context and summary of the battle, and to distribution of published materials that provide more detailed information about the battle and related events. An audiovisual program is not a critical need but could be possible in the future. It should be brief and informal so that visitors do not spend their entire visit indoors. The purpose of an audiovisual program would be to better tell the story of the events leading up to the battle, the battle itself, and the after effects.

- To interpret historic structures as important landscape features around which the battle was fought. Any human interest stories associated with the farm families' roles during the battle should be included. Interpretation of other aspects of farm life or events should remain secondary in focus.
- To manage and interpret the historic scene in a manner that assures the five original farm tracts remain much as they are today, but allows for removal of modern structures from the scene.

THE PLAN

The following represents the National Park Service proposal for the development of Monocacy National Battlefield. It proposes development in a phased approach consistent with the guidance provided in the General Management Plan, 1980.

VISITOR USE

Interpretation and Related Development (Phase I)

The Battle of Monocacy was a relatively short, straightforward battle and most of the major battle areas are easily accessible from the local road system. This, combined with the fact that the historic scene is so well preserved, provides visitors an excellent opportunity to learn about the battle onsite. The relatively uncomplicated battle story does not require an indoor interpretive facility, and it is preferable that visitors explore the battlefield rather than be directed indoors.

The objective of phase I development, therefore, is to open the battlefield to the public as soon as possible by providing a series of interpretive wayside exhibits throughout the battlefield that are accessible from the existing road system. The primary objective of these exhibits is to highlight, through illustrations and text, the important events which unfolded at those sites. Proposed wayside locations are shown numbered on the Interpretive Tour map. The installation of waysides and associated parking areas would be phased as access to the sites becomes feasible. Even though each exhibit would be prepared as a complete interpretive unit, it would be beneficial for visitors to view the wayside sites in the chronological order of the battle's action. To encourage this visitor pattern, a park folder and road sign system to orient and guide visitors should be developed in tandem with the installation of the waysides.

It should be noted that this approach to interpretation initially places a greater emphasis on vehicular travel through the park. This is a

deviation from the general management plan, which stated that circulation through the park would be via a trail system only. While a trail system is still recommended, such a system by itself would not adequately serve the majority of visitors. Based on visitor use patterns at other battlefields, only Civil War enthusiasts, who it is anticipated will comprise less than 20 percent of visitation, are expected to take the time to explore the battlefield on foot. The majority of general visitors from the Washington, D.C./Baltimore region and out of town tourists are expected to have limited specific interest in the battle and are not expected to take the time to hike much of the battlefield. This group can be expected to use only a relatively short (a mile or less) interpretive loop hike.

A Wayside Exhibit Proposal has been prepared. A summary of the proposal is provided below.

Exhibits 1, 2, 3, and 4

Access and Parking: Access directly off Route 355 just south of the river into 20-car parking area. This parking area would be temporary. Poor sight distances and high speed traffic require a better access solution, recommended under Phase II.

View: Monocacy River, Georgetown Pike bridge to the left, B&O Railroad Bridge to the right.

Exhibit 1

View: The railroad embankment on the opposite side of the Monocacy River.

Purpose: To describe the Union defense on the west side of the river.

Content: Confederate General Ramseur's division engaged the Union forces here all morning and through most of the afternoon.



View of Monocacy River and railroad bridge from proposed site for exhibits 1, 2, 3, 4

The Union skirmishers had to give up this position when they saw that General Wallace was burning the covered Georgetown Pike bridge behind them. They withdrew across the railroad bridge.

Exhibit 2

Purpose: To place the Battle of Monocacy in the larger context of the Civil War. This is not normally a suitable subject for a wayside exhibit but in the absence of other interpretive media, wayside exhibits must provide this information.

Content: While Union General Grant engaged Confederate General Lee at Petersburg, Va., Washington, D.C. was almost undefended. Confederate General Jubal Early invaded the north to 1) threaten Washington, D.C., 2) release Confederate prisoners

at Point Lookout, southern Maryland, and/or 3) remove some of the pressure on Lee at Petersburg.

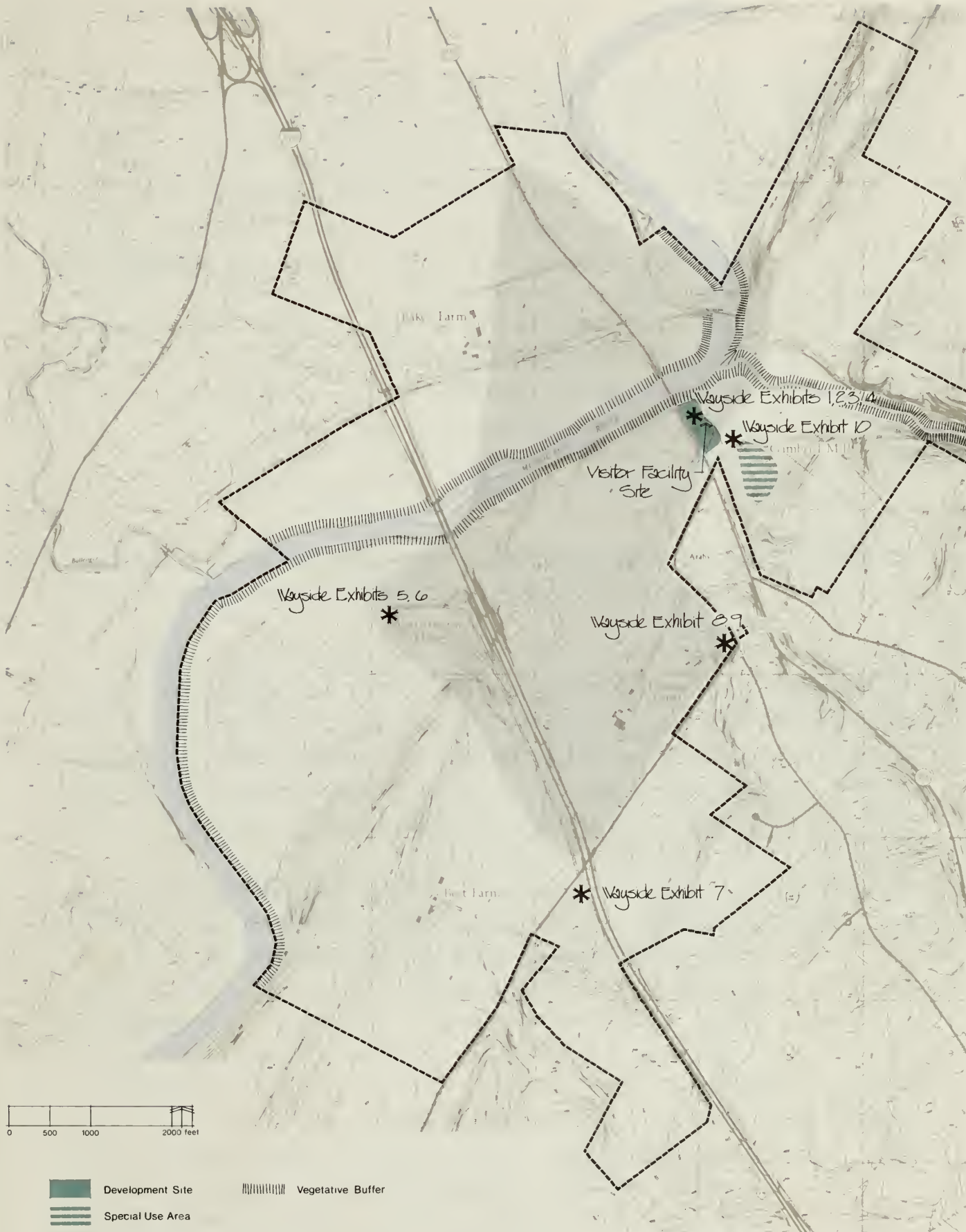
Union General Wallace, stationed at Baltimore, learned of Early's movements, assembled what soldiers were available, and marched here to Monocacy Junction to delay Early. Wallace placed skirmishers to protect the road to Baltimore and put most of his men on the banks of the Monocacy River to cover the Georgetown Pike and B&O Railroad crossings. Early was marching on Washington, so the farms surrounding Monocacy Junction became the battlefield.

Exhibit 3

Purpose: To summarize the events at Monocacy and the events that followed. This is not normally a suitable subject for a wayside exhibit but, in the absence of other interpretive media, wayside exhibits must provide this information.



View of railroad bridge



Interpretive Tour

MONOCACY NATIONAL BATTLEFIELD

United States Department of the Interior

National Park Service

Content: Although Union forces were far outnumbered and fairly easily defeated, the battle lasted an entire day, thus preventing General Early's march to Washington from continuing until the following day. This delay of approximately 24 hours gave General Grant enough time to return troops to defend Washington, although they arrived in Washington only some two hours ahead of General Early. The Confederates skirmished with Union defenders north of Washington, where President Lincoln was fired on by Confederate soldiers. The delay at Monocacy, by buying time for strengthening the Federal defense, may have saved the Nation's Capital.

Exhibit 4

Purpose: To orient the park visitor in relation to the Union defenses, to locate these defenses, and to present the opening action of the battle.

Content: Realizing that Frederick, Maryland, was difficult to defend, Union General Wallace chose to defend the Monocacy River. He concentrated his efforts at the Monocacy Junction, since not only the Georgetown Pike to Washington but also the B&O Railroad crossed the river at this point.

At Monocacy Junction, Wallace's troops occupied two blockhouses which had guarded the junction since 1863 and threw up earthworks along the east bank of the river. To prevent the Confederates from firing artillery at point blank range, Wallace also established skirmish lines on the west side of the river; the skirmishers used the railroad embankment for cover.

On the morning of July 9, Confederate General Dodson Ramseur's division marched down the Georgetown Pike from Frederick and encountered Wallace's troops. It became quickly apparent that a frontal attack across the Monocacy would be

costly. Therefore, while General Ramseur's division engaged the Union defenses at Monocacy Junction, most Confederate troops were sent south to ford the river, flank the Union defenses, and drive the Union troops toward Baltimore.

Exhibit 5

Access and Parking: Access off Baker Valley Road via current Worthington property access road (.8 mile).
Parking for 10 cars near Worthington House.

View: The view from Worthington House across the open fields to the line of trees marking the course of the Monocacy River.

Purpose: To detail the events of the Confederate flanking action at Worthington Ford.

Content: While Confederate General Ramseur's division engaged the Union defenses at Monocacy Junction, General McCausland's cavalry rode south on the Buckeystown Pike. They knew there was a ford near the Ballenger Creek entry into the Monocacy River. Because the river was low, Union General Wallace sent soldiers to guard the known fords. General McCausland's men encountered a squadron of Illinois cavalry at Worthington Ford. The Confederates dismounted and overcame the defense. They regrouped in Worthington Meadow and advanced to attack General Wallace's left flank.

Exhibit 6

Access and Parking: Access via current Worthington property driveway. Parking for 10 cars near historic fence line separating the Thomas and Worthington properties.

View: The line of trees (historic) along I-270 on Worthington Farm.

Purpose: To detail the two Confederate cavalry attacks on the Union flank.

Content: After crossing at Worthington Ford, General McCausland's Confederate cavalry regrouped in Worthington Meadow and advanced to attack General Wallace's left flank.

General James Ricketts positioned veteran Union soldiers behind the fence separating the Worthington and Thomas farms. At noon, when McCausland's cavalry topped the rise at Worthington House, they encountered some of the heaviest fighting of the day and were routed and pushed back beyond Worthington House.

General McCausland rallied his troops. He attacked and was defeated a second time.

Exhibit 7

Access and Parking: Access off Baker Valley Road, directly across from Worthington driveway and adjacent to I-270. Parking for 10 cars.

View: View of Brooks Hill and the Baker farm.

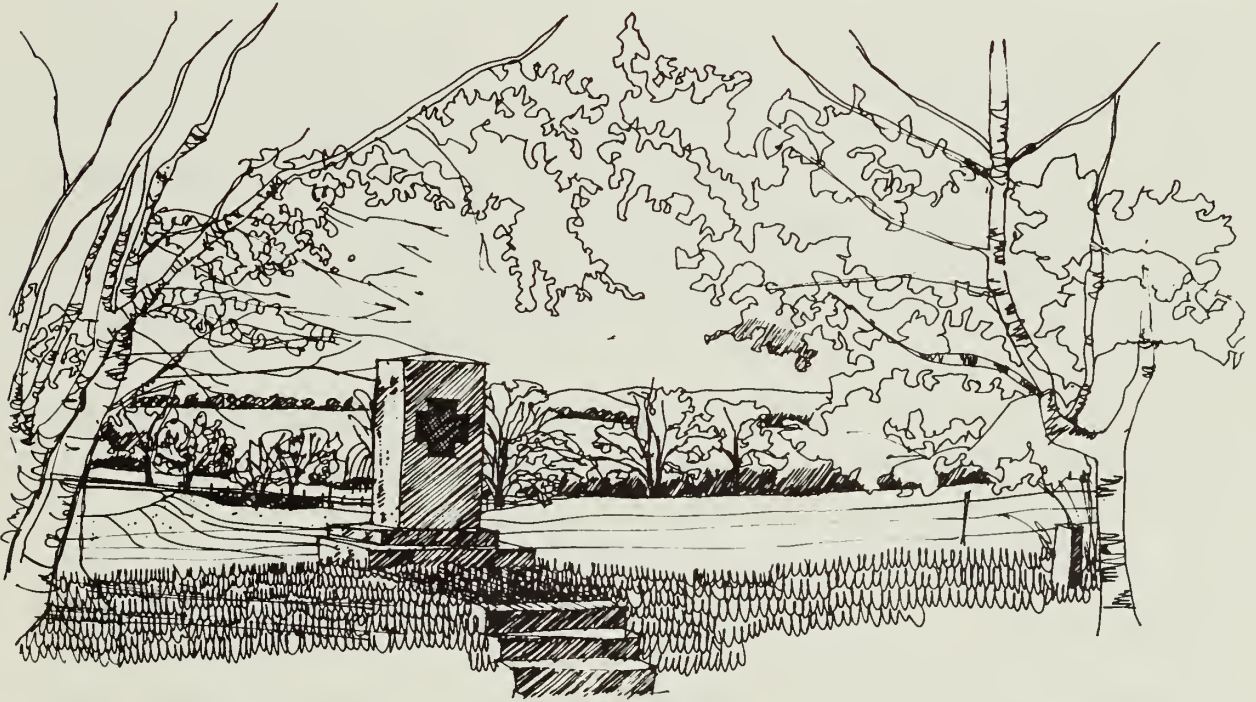
Purpose: To detail the successful Confederate flank attack.

Content: After Confederate General McCausland's cavalry was stopped a second time, General John Gordon's division made a 3-pronged attack. The division had crossed at Worthington Ford. Then Gordon sent Terry's Virginia Brigade to the left across the Worthington farm, York's Louisiana Brigade in the center across the toe of Brooks Hill, and Evans' Georgia Brigade to

the right over Brooks Hill and across the Baker farm. General Ricketts' troop were unable to hold and retreated toward the Thomas farm.

Exhibits 8 and 9

Access and Parking: Access off Araby Church Road near intersection of it and Baker Valley Road at Vermont Monument. Parking for 10 cars on historic Georgetown Pike road trace.



Site of proposed exhibits 8 and 9 with view of Vermont Monument and Thomas Farm

Exhibit 8

Purpose: To tell about the Union line of defense north of Thomas Farm and the effect of the battle on the Thomas family.

Content: Confederate General Gordon's attack pushed the Union line of defense back across the fields of Thomas Farm to this strong point. When the Confederate attack broke this line, the Union forces retreated to safety and the battle was essentially over.

Exhibit 9

Purpose: To tell about the meeting between Union Generals Grant and Sheridan, at the Thomas farmhouse, a month after the battle.

Content: Throughout the Civil War the Shenandoah Valley had been extremely important to Union and Confederate strategy. It was the breadbasket of the Confederacy, supplying much produce needed by the Southern armies. It was also a protected route pointing at the Union capital, Washington, D.C., and away from the Confederate capital, Richmond, Va.

In August 1864 General Grant met General Sheridan here and gave him the means and authority to destroy the Valley's usefulness to the South.

Exhibit 10

Access: Gambrill Mill will be a residence, therefore no public parking will be allowed. Access will be via hiking trail from Monocacy Junction overlook.

View: Gambrill Mill

Subject: The end of the battle; Gambrill Mill.

Content: General Ricketts' Union troops, unable to hold at the Thomas Farm, retreated with heavy losses through this valley toward the Baltimore Pike. By late afternoon the Confederates had secured the railroad bridge. General Early brought all his troops and supplies across the river that night. The Confederates did what damage they could to the railroad bridge but were unable to totally destroy it. The Confederates encamped until daybreak and then continued their march on Washington.

Gambrill Mill was used as a hospital.

Interpretive Hiking Trails. An interpretive trail system would wind through the historic Thomas and Worthington farm sites and would give visitors an opportunity for more personal interaction with the park. The map opposite shows the general trail layout. Access would be from the parking area off Route 355, with the main trail passing underneath the 355 bridge. This is a necessary safety precaution due to the high-speed traffic along 355 which would make an at-grade crossing very dangerous. The Thomas farm loop, a one-mile circuit hike, would be designed for barrier-free access and is expected to receive the most use as an interpretive trail (approximately 10 to 50 percent of non-recreational visitors). Use levels will depend on how long the park has been open, how developed it is, and whether guided interpretive hikes are provided. The remaining 2.6 miles of trail will serve the more adventurous battlefield visitors and those seeking opportunities for recreational hiking. An interpretive trail brochure, keyed to onsite markers, is recommended. Currently the historic Thomas farm property is not in NPS ownership; therefore, the trail system cannot yet be developed. Once the property is purchased, this trail network should be a priority. If access to the Worthington farm becomes feasible before access to the Thomas farm, then efforts should proceed in establishing the trail there.

For visitors who would like to visit the Gambrill mill site (Exhibit 8) from the Monocacy Overlook, a circuit hike linking the two areas would be developed. Refer to the map on the following page. This hike would allow visitors to travel the historic road trace between the mill and Bush Creek, down which the Union troops retreated following the battle. This .6 mile trail loop should be developed soon after the waysides are installed as it is expected to be the only accessible walking trail during the first few years after the park is opened.

Interpretation, Visitor Services, and Related Development (Phase II)

Once the battlefield is open and the wayside system in place (Phase I), efforts should begin in the development of a small contact facility, (Phase II). The purpose of this visitor facility will be to provide basic visitor services such as information, orientation, and restrooms. The structure would be located close to exhibits 1, 2, 3 and 4 on the high ground overlooking the river and the two bridges that played such important roles in the battle. Exhibits 2 and 3, which interpret the battle context and summary, should be relocated inside the facility, or at least directly on the facility's premises. Panels could be placed on an exterior wall of the structure, in a patio type environment. The facility and the associated parking area would be the key staging area from which visitors would begin the interpretive tour or trail system. The wayside tour would continue as the core interpretive medium. The visitor facility would provide printed interpretive materials and could function during the peak season as a staging point for guided interpretive walks.

The park's visitor carrying capacity will be approximately 120 persons once the visitor facility and parking area for 40 cars are constructed. At any one time, the estimated distribution of activity is expected to be about 50 percent in the visitor facility and the other 50 percent on the trails. The estimated carrying capacity of each developed wayside area with parking is about 30 individuals.



Interpretive Trail Plan

MONOCACY NATIONAL BATTLEFIELD
United States Department of the Interior National Park Service

Access to the visitor facility would be rerouted. Cars no longer would be allowed to park directly off 355. Instead, cars would be directed down Route 355 to the Gambrill farm entrance road. This road would be slightly realigned where it intersects Route 355 to allow for safer and easier turning. Turning lanes would be designed into Route 355. Cars would follow the entrance road onto a new spur which would cross a small stream and cut through the woods and up onto the rise alongside 355, where parking for 40 cars and a few buses would be provided. Part of this new access road would cross privately owned property on which is located a small liquor store. This property must be purchased before the road can be constructed.

As authentic battlefield artifacts are uncovered, it is recommended that they be stored in the regional archives or displayed at Antietam Battlefield, which has the capacity for museum exhibits. A small rotating exhibit could be set up for the visitor facility, but it would not be a central focus.

LAND USE AND MANAGEMENT

As a national battlefield on the National Register of Historic Places, the entire park is managed as a historic site. Within this site are several areas which can be identified for different management strategies. These are shown on the Interpretive Tour map on page 22 as 1) core battle area, 2) vegetative buffer, 3) development site, and 4) special use area.

The core battle area is that land on which most of the battle action occurred. It is also the most important area for historic scene protection. Within the core area are modern intrusions and alterations which impact the integrity of the scene but which will remain indefinitely, such as modern roads, automobile traffic, farm equipment, and power lines. The Route 355 corridor, where a liquor store currently stands and where "Moms Restaurant" once stood, has been considerably altered over the years and will continue to be heavily influenced by high speed traffic. For this reason, and others, the



Development Concept Plan

BUSH CREEK · MONOCACY NATIONAL BATTLEFIELD

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National Park Service

development of that site for minimal visitor facilities, although partially within the core battle area, is considered appropriate. Other development sites shown are small, limited to wayside and parking development.

The special use area identifies the location of the anticipated historic property lessee who will be operating a corporate conference center. The park would have limited interaction with this operation as determined by the lease agreement. Pedestrian access to the Gambrill mill would be allowed, and possibly access to the old mill race and the hilltop behind the buildings.

Protection of the historic scene outside of the core area remains a critical management responsibility. One important strategy to protect the scene from encroaching outside development is to maintain the existing vegetative buffer along the river shore, especially in those areas where the opposite shore is not within the boundary. This buffer has the dual role of protecting the shore from erosion and should be considered a natural area.

RESOURCE MANAGEMENT (Phase I, II)

The primary objective of resource management for Monocacy National Battlefield is to protect and preserve the historic battlefield scene. The Land Protection Plan, 1983, is being implemented now as the first major step in protecting this scene.

Landscape Management. As was mentioned earlier, the historic scene is relatively unchanged from 120 years ago. This is particularly so in the core battle zone where the Thomas and Worthington farms are located. To ensure that it stays that way, it is critical that open areas remain open through active measures such as mowing or cropping. This will prevent the need for future large scale tree removal--an expensive and controversial action now being taken by other national battlefields. Agricultural leases would be established wherever they do not substantially interfere with visitor use areas, and heavy equipment would

be permitted within the core historic zone for planting and harvesting activities. Agricultural lessees would be required to store heavy equipment offsite and observe the best management practices to protect soils from erosion. The park would mow areas not leased for agriculture.

Other important aspects of landscape management are preservation of historic fence lines and structures. Those historic fence lines that remain by evidence of tree and shrub lines should be retained. Those fence lines that are not historic should be removed. An important advantage of retaining tree fence lines is the shade they offer visitors. Re-establishing fence lines that have disappeared should be done only after careful study of property records.

Within the core battle area are two historic structures, Worthington House and Thomas House (also known as Araby). Both structures were key landmarks around which much fighting occurred. Therefore, it is important that the exteriors of these structures remain stabilized and are restored, if possible, to ensure an accurate scene. In the long term, all post-war development should be removed from around Thomas House and historic structures reports should be prepared for both houses. Reconstruction of missing original outbuildings is not necessary and is not recommended.

The historic leasing program is a possible avenue in the preservation of these structures. Gambrill House will be leased through the program. Another viable option if the Thomas house is acquired is to use it as a visitor facility. This is the only structure of major battlefield significance and visitors should have access. The meeting held in this house between generals Grant and Sheridan is of major historical significance and should be interpreted on site.

Along the northern and western boundaries of these farms is a buffer of woods separating them from the Monocacy River. Although not all of this acreage was forested at the time of the battle, these trees function in two important ways. They are important in riverbank erosion control

and watershed protection. They also are a visual buffer against man-made intrusions along the park's periphery. As the Frederick area grows, the development pressures along park boundaries will continue to intensify. For these reasons, it is important that this forested buffer remain. Removal of individual trees will occur only where necessary to provide critical views and trail pathways. In particular, some vista clearings will be necessary at the Monocacy Overlook in order to clearly view the railroad and turnpike bridges.

Historic Artifacts and Earthworks. Remaining evidence of the battle and of early habitation within the park is not well documented or readily evident. Undoubtedly many artifacts have yet to be uncovered. As they are uncovered, the park should document them and either display them or store them at the regional artifact storage facility. To protect the battlefield from metal detecting activities, it is critical that the park be patrolled periodically. The only remaining earthworks are very isolated on the Bush Creek site and susceptible to illegal metal detecting activities. Access to this area from the Bush Creek site will not be provided and hopefully will discourage artifact hunters.

An archeological survey of the entire battlefield is needed and should be scheduled once all properties have been acquired. Otherwise a segment by segment survey could be attempted. Any development requiring soil disturbance will be monitored by an archeologist.

RECREATION

The proximity of the Monocacy River and the park's open space to the growing Frederick County area will undoubtedly attract many recreationists. About 50 percent of the park's visitors will be coming for "recreational" rather than "historic" purposes. While the battlefield development described in earlier sections is primarily for the preservation and interpretation of historic resources, this development will also provide basic facilities to support such activities as hiking, shoreline fishing, and nature study. Parking for recreationists will be provided at Monocacy Overlook.

Organized recreational activities involving large groups of people should be discouraged as should any activities that may intrude on the historic scene. If such activities are allowed, they should be regulated through a permit system. Local parks provide adequate canoe launching facilities. Therefore, no launching facilities will be provided, but canoeists would be allowed to land at the Monocacy Overlook area and visit the park.

PARK OPERATIONS

During the first phase of battlefield development, administrative, resource management, and maintenance requirements are anticipated to be low due to limited development and low initial visitation levels. Park operations, therefore, would continue to be based out of Antietam National Battlefield. Once it is no longer cost effective for Antietam-based maintenance staff to service Monocacy Battlefield, routine maintenance responsibilities would be contracted out. To meet park storage needs, as well as maintenance needs not served well through contracting, a small maintenance work and storage area will be rented in the nearby Frederick area. This may occur later in phase I, or not until phase II, depending on how quickly development progresses and visitation levels rise.

In phase II, most administrative and resource management needs would continue to be met by Antietam-based staff. Some of the more immediate day to day responsibilities of visitor protection and resource monitoring would be conferred to on-site ranger staff.

Currently Gambrill Mill is used for park housing. Once the historic lessee begins his operation, the need for this 24 hour NPS presence would be eliminated. No other park housing would be provided. The Frederick area provides an adequate and proximate supply of housing for any future NPS housing needs.

PLAN IMPLEMENTATION

Phase I

Development:

Wayside Exhibits 1-8	\$	31,000
Wayside Parking Areas	\$	116,000
Directional Signs	\$	2,900
Park Brochure	\$	15,000
Trail Development (.6 mile)	\$	20,800
Improve Worthington Farm Access Road (.8 mile)	\$	259,000

Staffing:

Park Ranger GS-5 .6 FTE	\$	9,500
- based at Antietam		

Equipment:

GSA Vehicle	\$	3,000
Radio	\$	3,000

Receipts:

Agricultural Leases (current)	\$	6,700
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Summary - Phase I Costs

Current Budget	\$	21,000
Development Costs	\$	444,700
Annual Costs (staff, equipment)	\$	15,500

<u>Receipts</u>	\$	6,700
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Phase II

Development:

Visitor Facility:

--visitor contact area & office space (700 sq. ft.)	\$152,300
--restrooms (450 sq. ft.)	139,200
--furnishings	9,000
--site improvements and vista clearing	29,000
--sidewalks	12,900

Utilities:

--well	8,700
--phone & electricity	4,400

Roads and Parkway:

--new road to visitor facility	183,300
& realignment of entrance	
--redesign of parking area at visitor facility (40 cars)	81,200

Trails:

--1.6 miles paved trail	97,400
--2.0 miles unpaved trail	58,000

Total: \$775,400

Staffing:

Supervisory Ranger	GS-9	FTE	\$21,800
Ranger	GS-4	.6 FTE	8,900
Ranger	GS-4	.6 FTE	8,900
Laborer	WG-3	.4 FTE	4,000
		2.6 FTE	\$43,600

Contracted Maintenance: \$30,000-50,000

Equipment:	
GSA Vehicle	\$3,000
Radio	3,000
Typewriter	800
Miscellaneous Equipment	<u>500</u>
Total:	\$7,300

Other Annual Costs:

Rental of maintenance space	--
Telephone, electricity, heat	\$3,800
Supplies and materials	<u>1,000</u>

 Total:

Receipts

Agricultural Leases (current and anticipated)	\$19,500
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Summary--Phase II Costs

Development	\$775,300
Staffing	43,600
Contracted Maintenance	\$30,000-50,000
Equipment	7,300
Other Annual Costs	
<u>Receipts</u>	\$19,500

Equipment:

1 GSA Vehicle	\$3,000
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ALTERNATIVES TO THE PLAN

ALTERNATIVE B--CONTINUATION OF EXISTING OPERATIONS

This alternative constitutes the minimum requirements that could be implemented. Under this alternative, Monocacy National Battlefield would remain closed to the general public and would continue to be managed off-site by the Superintendent at Antietam Battlefield and his staff in Sharpsburg, Maryland. The major focus of activities would continue to be protection of the natural and cultural resources, including current efforts to implement the land protection plan. The park would remain undeveloped, with no special provisions for visitor use, interpretation, or other onsite operations. Special access to the battlefield would be allowed upon request and only to those areas in NPS ownership. Efforts to preserve historic structures through the Historic Property Leasing Program would continue to be explored. Additional major resource protection efforts would include a comprehensive park-wide archeological study, and a historic structures report for Worthington House (and Thomas House, when purchased.)

A volunteer program could be organized through staff efforts at Antietam Battlefield. Volunteers could provide guided interpretive tours of the battlefield or act as resource monitors. Organizing a volunteer group may or may not be successful, depending on the amount of interest within the community and amount of time available for park personnel to devote to the program.

Estimated staffing requirements shown below are based on anticipated long range needs for coordination of agricultural and historic property leases, volunteer coordination, resource monitoring, and occasional maintenance work.

Staffing:

Park Ranger	GS-5	FTE	15,000
Park Ranger	GS-5	.4 FTE	<u>6,300</u>
		1.4 FTE	21,300

ALTERNATIVE C -- BATTLEFIELD VISTA

As in Alternative A, this alternative would also be a phased approach to development in order to expedite opening the battlefield to the public. The first phase would be the same as in alternative A--an interpretive wayside system along existing public roads highlighting the major phases of battle action. The second and final phase would differ from Alternative A by providing a more comprehensive interpretive approach to the Battle of Monocacy and a more autonomous administrative staff. The premise behind this approach is that for visitors to gain a full understanding of this battle's significance, an audiovisual medium is necessary for presenting the story. It also places greater importance on having a more prominent NPS presence onsite to greet visitors and provide services on a scale that much of the public has come to expect of a NPS battlefield site. This would entail constructing a visitor center on the hill which overlooks both the Gambrill mill and a large portion of the battlefield. The hilltop site itself is outside of the historic battle area. The visitor center would be set back from the highest point on the hill to prevent it being visible from other battlefield points.

A short walk from the visitor center, visitors would get a sweeping view of the valley and, with a well prepared wayside, could get a general overview of the battle's flow across the landscape. Due to the large distances involved and the way geographical features blend together as a result, this overlook does not provide visitors with a clear visual understanding or an intimate feel for what happened. All visitors, therefore, would be encouraged to travel to other battlefield sites by foot or car to get a clearer appreciation of the battle events.

The purpose of the visitor center, beyond providing basic visitor orientation, is to present an interpretive audiovisual program to the visitor. The purpose of such a program is to do well what an onsite wayside system cannot; that is, to relate the importance of the battle in context to the Civil War and American history. This entails relating the battle to the strategic setting of the Civil War in the summer of 1864, interpreting Confederate and Union objectives that led to the battle, and



- Primary Trail System
- Secondary Trail System
- New Structure
- - - Park Boundary

showing the results of the battle's outcome on following Civil War events. Exhibits 2 and 3, described in Alternative A, would be replaced by the visitor center audiovisual program. The program would last approximately 10 minutes.

An indoor heated facility with an audiovisual program is expected to attract more visitation, especially from large groups such as school classes and bus tours. Such a facility also prolongs the average length of a person's visit by at least the length of the audiovisual program. As a result, more traffic with a longer turnover period for parking is expected than in Alternative A. The hilltop site can best accommodate this level of visitation because there simply is more available space for the parking levels expected. The development site at the Monocacy Overlook is more restricted because of the bordering floodplain and State Route 355. Also, the site will serve additional publics, such as river recreationists and those hiking the trail system. Provision of parking for these groups will also be necessary.

The estimated visitor carrying capacity for the park once the visitor center and Monocacy Overlook area are developed with parking for 40 and 25 cars, respectively, is about 195 individuals. The estimated distribution of activity for the visitor center area is 75 percent visitor center use and 25 percent recreational. The Monocacy Overlook area is anticipated to receive 70 percent use for trail hiking and 30 percent as a stop along the wayside driving tour.

As illustrated on the page opposite, a new entrance road would provide access both to the visitor center, the leased operation, and the Monocacy Overlook. The location of this entrance provides much better site distances for traffic turning onto or off the highway. An additional safety aspect is the internal road system at that site which decreases the number of turns traffic must make on and off the highway. This highway carries high speed traffic between the communities of Frederick and Urbana. Also, providing an internal road to Monocacy Overlook will encourage the public to continue their battlefield visit by making access to the first major stop of a tour both easy and direct.

Maintenance. Under this alternative a maintenance facility would be constructed onsite. The advantages to this option include being able to design the facility to the park's specific needs, having the facility close at hand, and designing it so that it can be expanded if necessary. The facility would be located off Ball Road at an inconspicuous site near the park's border. The primary access road would be from Ball Road, but direct access to the visitor center could be provided via a gravel road. The structure would provide office, storage, and work space to meet anticipated needs at the Phase II development level.

Implementation - Alternative C

Phase 1

Development:

Wayside Exhibits 1-8	\$31,000
Wayside Parking Areas	116,000
Directions Signs	2,900
Park Brochure	15,000
Trail Development (.6 mile)	20,800
Improve Worthington Farm Access Road (.8 mile)	259,000

Staffing:

Park Ranger GS-5 .6 FTE	9,500
- based at Antietam	

Equipment:

GSA Vehicle	\$3,000
Radio	3,000

Receipts:

Agricultural Leases (current)	\$6,700
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Summary:

Current Budget	\$21,000	
Development Costs	444,700	
Annual Costs (staff, equipment)	15,500	
Receipts		\$6,700

Phase II

Development:

Visitor Center (2500 sq. ft.)	\$798,000
--visitor information and office space (900 sq. ft.)	
--interpretive a.v. area (500 sq. ft.)	
--restrooms (700 sq. ft.)	
--utilities, storage (400 sq. ft.)	
--furnishings	
--landscaping	

Maintenance Facility (3,330 sq. ft.)	468,400
--vehicle and equipment storage (1,200 sq. ft.)	
--workshop (1,500 sq. ft.)	
--material storage (480 sq. ft.)	
--office (150 sq. ft.)	
--restroom (100 sq. ft.)	

Utilities:

--v.c. well	6,000
--v.c. phone & electricity	55,000
--maintenance well	6,000
--maintenance phone & electricity	10,000

Roads:

--new entrance and paved roads at Bush Creek site (.6 mile)	312,500
--maintenance road--gravel (.13 mile)	47,000

Parking:

--visitor center parking (40 cars)	56,000
--maintenance parking (5 cars)	8,000
--Monocacy overlook parking (25 cars)	<u>35,100</u>

TOTAL	\$1,801,400
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Staffing:

Visitor Center

--site supervisor	GS-9	\$24,000
--clerk typist	GS-3	12,600
--park ranger	GS-5	15,800
--park ranger	GS-5	15,800
--park ranger	GS-4 (.6 man year)	8,500
--park ranger	GS-4 (.6 man year)	8,500

Maintenance Facility

--maintenance worker	WG-6	19,700
--laborer	WG-3	17,500
--laborer	<u>WG-3 (.6 man year)</u>	<u>10,500</u>

TOTAL	7.8 FTE	\$132,900
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Equipment:

--GSA vehicle (3)	\$9,000
--radios (3)	9,000
--typewriters (3)	2,400
--miscellaneous	<u>2,500</u>

TOTAL	\$22,900
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Other annual costs:

--telephone, electricity, heat	8,000
--supplies and materials	<u>5,000</u>
TOTAL	\$13,000

Receipts:

--agricultural leases (current and anticipated)	\$19,500
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Summary--Phase II:

Development	\$1,801,400
Staffing	133,000
Equipment	22,900
Other annual costs	13,000
Receipts	19,500

OTHER ALTERNATIVES CONSIDERED

VISITOR SERVICES--GAMBRILL HOUSE

Gambrill House, also known as Boscobel, was assessed for its appropriateness as a visitor contact facility. It was determined to be inappropriate due to a number of factors. The house contains 11,000 square feet of space--much more space than is needed for basic visitor services and interpretation at Monocacy Battlefield. The excess space can lead to program and budget expansion over time beyond the basic needs of the park. Also, the house was not constructed until after the battle (circa 1868). This creates difficulties for interpreters in explaining the original scene and can result in confusion for visitors. Finally, the house is in major disrepair and would require a significant investment to repair and adapt for use.

VISITOR SERVICES--GAMBRILL MILL

Gambrill Mill was considered for adaptive use as a visitor contact facility during the early planning stages. It was dropped from consideration because of the high cost involved in making it barrier-free and in adapting and maintaining the interior for visitor use. Its location in the floodplain is a major problem since the mill is known to have flooded up to the second floor during Hurricane Agnes in 1972. The Monocacy River floods regularly and flood waters reach the base of the mill annually, requiring the lower entrance to be protected with sand bags. Another problem with the site is locating enough parking without significantly impacting the aesthetics of the site. The most likely area for parking is across the access road. To adapt the site, a significant amount of fill would be necessary and relocation of a section of stream.

VISITOR SERVICES--STABLES SITE

The stables site was given serious consideration until late in the planning process as the location for a small, new visitor contact facility. (This would require eliminating the existing structures). The

advantages of the site included its location above the floodplain, the capacity of the site to accept future expansion of parking and facilities, and the fact that it was an already disturbed area. In addition, utilities and an access road exist already, therefore minimizing the cost of new construction. The site also is easily accessible off state route 355 (.3 mile) and places visitors within an easy walk of Gambrill Mill, Monocacy Junction wayside, and the battlefield trail system on the other side of Route 355. This site was eliminated from consideration when the decision was made to allow historic leasing of the Gambrill farm buildings.

INTERPRETATION--BLOCKHOUSE AND EARTHWORKS SITE

This site on the river bluff by the B&O Railroad was considered for a major interpretive wayside. The historic remains, combined with the potentially good view of Monocacy Junction, made it a natural option for interpretation of the first phase of battle. It was finally eliminated from consideration for a number of reasons. First, the site is a .3 mile walk from the visitor facility area and only a small percentage of visitors would be likely to venture that far. For the small number of people who would hike to the river bluff, the cost to provide and maintain access there would be extremely high. It would require building a pedestrian bridge over Bush Creek. Due to safety reasons, pedestrian access across the railroad tracks could not be allowed and some type of pedestrian bridge would be required underneath the B&O Railroad Bridge. In order to provide an adequate view of Monocacy Junction several acres of trees would have to be cut. And finally, providing easy access to the site would add to resource protection problems because of the attraction to artifact hunters.

AFFECTED ENVIRONMENT

CULTURAL RESOURCES

Comparison of agricultural land use today with agricultural land use in July, 1864, reveals that very little has changed these last 120 years. The historic configurations of the Best, Baker, Worthington, Thomas, and Gambrill farms are relatively unchanged. All continue to be grazed or farmed and, as a result, the open, pastoral landscape which set the stage for the Monocacy battle remains as the park's most significant resource.

Historic structures associated with the battle include Worthington House, Thomas House, and Gambrill Mill. The Worthington and Thomas houses are the most significant of these structures. They were located in the midst of the heaviest fighting and are critical landscape features. The Thomas house, known as Araby, was also the site where General Grant assigned Major General Philip Sheridan to command the Middle Military Division on August 7, 1864. The following campaign by Sheridan crushed Early's army by October 20, 1864.

The Thomas farm remains in private ownership. Until purchased, the condition of the structure will remain unknown. The Worthington house has been stabilized. Although the interior is seriously deteriorated, there are enough architectural remnants to allow for complete restoration. Neither structure has been nominated for the National Register and no historic structure reports have been prepared.

Other significant cultural resources include the historic route of Georgetown Pike, most of which follows the current Route 355. The historic alignment deviates from 355 near the Gambrill farm entrance and follows Araby Church Road until it rejoins 355. Route 355 crosses the Monocacy River at the Pike's original location and rests on the original bridge abutments present in 1864. The original covered bridge was burned during the battle. Generally, however, the road dimensions, surfaces, and other engineering features have changed.

Similarly, the Baltimore & Ohio Railroad (historically the Chesapeake & Ohio) follows its historic alignment of 1864, with historically significant Monocacy Junction now appearing very similar to its appearance then. The stone piers of the railroad bridge across the river are original, although the present bridge was built later, after the battle.

The only identifiable remains of blockhouses or earthworks are located on the river bluffs just north of the B&O Railroad. Here can be found a line of trenches and the remnants of a blockhouse foundation.

The Bush Creek area is in the Monocacy River Valley, an area of high archeological potential for prehistoric sites. Sites dating from Early Archaic to Late Woodland have been recorded in the river terraces. Preliminary site survey by the National Park Service in 1984 indicated there are several prehistoric sites in the park, and the potential exists for discovering more in the Bush Creek area. Similarly, many undiscovered historic resources, such as remnant earthworks, historic structure foundations, and artifacts may still be within the site. Therefore, before any development occurs in this area, the potential archeological resources (prehistoric and historic) must be surveyed to determine their type and location.

NATURAL RESOURCES

In the process of planning for development of roads, parking areas, trails, vistas, picnic sites, and structures, careful consideration will have to be given to the potential effects of such development, including tree removal, soil compaction, and soil erosion.

The Bush Creek site consists of approximately 140 acres of land situated along the Monocacy River and Bush Creek. In addition, a small unnamed tributary flows through the property and enters the Monocacy about 100 yards upstream of the Route 355 bridge and 200 yards below the mouth of Bush Creek.

Presently, the area consists of pastureland, and patches of woods which have invaded old fields. There are approximately 5 acres with moderate to heavy tree cover, plus another 25 acres with moderate to thick underbrush and tree cover. Although some upland hardwoods exist here, most of the woodland sites represent bottomland hardwood forests within the floodplains of the Monocacy River. Species such as sycamore, river birch, box elder, black willow, dogwood, red maple, jewel-weed, greenbrier and other shrubs and broadleaf perennial weed stages of old-field succession are dominant. Although several acres of riparian habitat exist along the banks of the Monocacy River and Bush Creek, it is not anticipated that proposed developments will significantly affect any identified wetland habitat.

The remainder of the land (approximately 100 acres) is cleared and in use as horse corrals, riding rings, and pastures, with some cultivated feed cropland at higher elevations. The mixture of vegetation types found on the site provides good to excellent habitat for eastern cottontail rabbits, raccoons, opossums, red fox, woodchucks, and various species of mice, voles, and shrews, and a variety of amphibian and reptilian species. Birds likely to occur in the area are characteristic of the resident species of this Maryland area. In addition, Bush Creek and Monocacy River are excellent examples of Piedmont freshwater streams, and provide aquatic habitat for small mouth bass, catfish, carp, and various species of panfish and minnows, as well as numerous invertebrate species. Also, waterfowl benefit from these streams with the main species being woodducks and mallards. Although some endangered or threatened wildlife species, such as peregrine falcons, may range over the park, no known species of plant or animal on the federal or state endangered species list reside in the park.

Since approximately 40 percent (about 60 acres) of the total land area is contained in the floodplain of the Monocacy River, some serious flooding of low-lying land along the Monocacy River and Bush Creek has occasionally occurred in the past. The most common cause of serious flooding appears to be the torrential rains of the remnants of hurricane-bred storms. About 25 percent of the total area bordering

Monocacy River and Bush Creek is subject to seasonal flooding due to snow melt, spring rains, or summer thunderstorms. In addition the intermittent streams on the site create some drainage problems in the area.

According to the soil map published by U.S. Geological Survey, the composition of the soil on the subject property is basically a silt loam type underlain with either a shaley limestone or heavy stoney-clay topsoil in the higher elevations, with the soil type being described as "easily worked and fairly productive soil for general crops." According to the Soil Conservation Service's farmland map, there are no prime or unique farmlands within the site's borders.

ENVIRONMENTAL CONSEQUENCES

IMPACTS

- Installing visitor facilities such as a visitor contact station, parking lots, access roads, and trails would provide visitors access and circulation within the park. Also visitor orientation to the park's resources and interpretation of the Battle of Monocacy would be made available by the proposed developments on the Bush Creek site and at wayside stops. These effects would be major, long-term benefits to the park visitor.
- Realigning the existing intersection between Routes 355, Araby Church Road, and the park's entrance road would eliminate hazardous traffic conditions by:
 - 1) providing turn lanes on Rt. 355, thereby allowing automobiles to safely enter the park;
 - 2) locating this intersection further away from the base of a hill which obstructs the view of on-coming vehicles, and
 - 3) placing the park entrance road directly across from Araby Church Road and perpendicular with Rt. 355; this would improve right turns onto 355 from the site and eliminate the unsafe traffic maneuver which is required now when crossing Rt. 355 in order to reach Araby Church Road.

These effects would be major, long-term improvements to the safety of the park visitor and general public.

- Site preparation, excavation, and installation of the intersections, trails, parking lots, and other visitor facilities would remove approximately 1.4 acres of vegetation and wildlife habitat under the plan, and 2.7 acres under Alternative C. This would be an

unavoidable effect; however, the vegetation found in the area is common throughout the park. Any wildlife disrupted during construction activities would relocate elsewhere in the park. No specimen trees, and rare, unique, threatened, or endangered plant or animal species would be affected. These effects would be long term and minor.

- The loss of vegetation, movement of equipment, and site excavation during construction of visitor facilities would result in some soil erosion and stream sedimentation. Also, construction activities associated with implementation of the plan would increase noise and traffic in the park and on local roads. All the above effects would be temporary, minor, and local.
- Locating trails through the Thomas and Worthington farms would remove a portion of these farms from agricultural use. However, no prime or unique agricultural farmland exists here and much of the site would remain in its present use in order to maintain the integrity of the historical scene.
- Development of the park will increase visitation and non-local traffic, which would increase highway safety problems in the nearby communities. Proposed roadway changes such as turn lanes, entrance realignment, and adequate parking will improve some hazardous conditions and problems of increased traffic should have minor and local impacts.
- Certain facilities, such as some of the trails, an interpretive wayside, and the access road would be located in the 100 year floodplain. However, none of the proposed development actions should create significant adverse impacts on the river's floodplain and are considered accepted actions under National Park Service floodplain management guidelines. There could be some temporary stream sedimentation during construction activities; however, erosion control methods, such as hay bales, sediment traps, and revegetation with native species should minimize this impact. In order to avoid adverse environmental impacts, the removal of

vegetation along the river's floodplain will be the minimal amount necessary to create interpretive scenes. The overall characteristics of the floodplain should not change and there should be no increase in the area flooded upstream or downstream of this project.

- Implementation of this plan should provide protection to significant cultural resources by providing on-site security and by serving as a catalyst in the production of historic resource reports. This effect should be a major, longterm benefit to the park's resources.
- Leasing of Gambrill House through the Historic Property Leasing Program will facilitate preservation of a locally important cultural resource through regular maintenance and the repair and stabilization of deteriorating fabric. Leasing will defray NPS administrative and maintenance costs related to the house, mill, and stables. A leasing program allows for a "continuum" historic scene, although lease requirements should limit major alterations to the site's landscape unless such changes contribute to the restoration of the Civil War period scene.
- The entire park is listed on the National Register of Historic Places; however, this plan should not adversely effect any of the characteristics which qualified the park for listing on the National Register. Visitor facilities would be constructed and located to provide minimal impact on the park's historic scene and cultural resources. An archeologist will monitor all construction activities to ensure any unknown archeological resource is not disturbed. The Bush Creek Site has been determined not to be in the most significant core battle area; however, motorized park vehicles on asphalt trails would travel occasionally through the significant battlefield grounds on the Thomas farm. Also, development of certain visitor facilities would be located near Gambrill House, which is separately listed on the National Register of Historic Places. Therefore, placement of facilities such as buildings and overlooks would be landscaped and properly located to minimize any adverse affect to the site's historic scene.

MITIGATING MEASURES

- Specific site locations for the new roads, parking lots, trails, and other visitor facilities would be chosen with consideration of minimizing impacts on the park's cultural and natural resources. For example, only the minimal amount of vegetation necessary would be removed to establish vistas, and sites for facilities would be landscaped with appropriate native vegetation in order to screen non-historic structures. Vegetative screens would serve also as wildlife habitat, thereby minimizing the loss of vegetation and habitat during construction activities and re-establishing the area's natural environment. Similarly, areas where old roadways are obliterated would be re-established as natural sites, mitigating the loss of habitat along the new road alignment.
- In order to reduce soil erosion and stream sedimentation during construction of visitor facilities, hay bales and sediment traps would be placed in appropriate areas, when needed. Also, if necessary, after construction activities are completed, areas in which ground vegetation is destroyed would be regraded to original contours and revegetated with native species. To further reduce runoff, porous pavement and vegetative windscreens would be used when constructing trails, roads, and parking lots.
- The National Park Service conducted a surface reconnaissance survey and examined and evaluated the archeological resources of the Bush Creek Tract in 1984. It was determined that ground testing should be completed for the area before any ground disturbing activities are initiated in order to mitigate the effect of development on as yet undiscovered archeological features. Therefore, testing of construction sites would be completed before implementation of plan proposals, and furthermore, monitoring of construction activities would take place, and if any archeological resources are discovered during construction or excavation activities, an investigation of their type and abundance would be made and their significance determined.

Cooperation with the Maryland Highway Department would be sought for the intersection changes and the possible reduction of speed limits between park boundaries. This would be especially important when access to Monocacy Overlook is provided directly off Rt. 355.

CONSULTATION

Advisory Council on Historic Preservation
Corps of Engineers
Environmental Protection Agency
Federal Emergency Management Agency
Frederick County Committee of the Maryland Historical Trust
Frederick County Planning Commission
Maryland Department of Fisheries
Maryland Department of Natural Resources
Maryland Department of Water Resources Administration
Maryland Natural Heritage Foundation
Maryland Tidewater Administration
Maryland State Historic Preservation Officer
U.S. Fish and Wildlife Service
U.S. Soil Conservation Service

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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